

What is claimed is:

2. The system of claim 1 wherein the consumable component consolidation program is further operative to consolidate the identified need to replenish the consumable component and/or perform maintenance for one or more of the at least one computer peripheral device in the network environment.

3. The system of claim 1 further comprising another personal computer and an electronic communication link signal coupling the another personal computer with an external seller of a consumable component for one of the at least one peripheral devices.

4. The system of claim 1 further comprising another personal computer, wherein the another personal computer is operative to monitor the at least one computer peripheral device to determine the state of a consumable for each of the at least one computer peripheral devices, and notify a user via the user interface of a need to replenish one or more consumables.

1           5.     The system of claim 1 further comprising another personal  
2 computer and another centralized server having a consumable re-order program  
3 including instructions to send a consumable re-order notification to a  
4 consumables purchaser at the another personal computer.

1           6.     The system of claim 1 wherein the consumable component  
2 comprises a first consumable component, and further comprising a second  
3 consumable component unique from the first consumable component, wherein  
4 the consolidation program monitors the at least one computer peripheral device  
5 to identify when the second consumable component is near a threshold level  
6 requiring replenishment and/or maintenance and the consolidation program  
7 consolidates the need to replenish and/or perform maintenance on the first and  
8 second consumable components.

1           7.     The system of claim 6 wherein the first consumable component  
2 resides on a first peripheral device, and the second consumable component  
3 resides on a second peripheral device.

1           8.     The system of claim 6 wherein the first consumable component  
2 and the second consumable component reside on a common peripheral device.

1           9.     The system of claim 6 wherein the server is operative to  
2 automatically notify a maintainer of the consolidated need to replenish and/or  
3 perform maintenance.

1           10.    The system of claim 6 wherein the server is operative to  
2 automatically notify a purchaser of the consolidated need to replenish and/or  
3 perform maintenance.

1           11. The system of claim 6 wherein the consolidation program  
2 generates a warning message indicating that the second consumable component  
3 is near the threshold level.

1           12. The system of claim 1 wherein the centralized server comprises  
2 an integrated web server operative to manage network peripheral devices.

1           13. The system of claim 1 wherein the consolidation program  
2 includes a configurable threshold setting for the consumable component of the  
3 peripheral device, wherein a user of the centralized server selectively configures  
4 the threshold setting for the consumable component such that the identified  
5 need to replenish the consumable component is triggered by the threshold  
6 setting.

1           14. A consumable order assistance system for a computer  
2 peripheral device within a centralized network environment, comprising:  
3 a personal computer having a user interface;  
4 a computer peripheral device including a consumable;  
5 a centralized server having a consumable re-order program including  
6 instructions to send a consumable re-order notification to a consumables  
7 purchaser at the personal computer; and  
8 a computer network interconnecting the personal computer, the  
9 computer peripheral device, and the centralized server.

1           15. The consumable order assistance system of claim 14 further  
2 comprising an electronic communication link signal coupling the personal  
3 computer with a provider of the consumable for the peripheral device.

4           16. The consumable order assistance system of claim 14 wherein  
5 the centralized server includes a consumable component consolidation program  
6 for monitoring the at least one computer peripheral device to identify a need to

7 replenish a consumable component and/or perform maintenance, consolidating  
8 the identified need to replenish the consumable component and/or perform  
9 maintenance for one or more of the at least one computer peripheral device in  
10 the network environment, and notifying a user of the consolidated, identified  
11 need by rendering instructions that are sent to the user at the personal  
12 computer.

1 17. The consumable order assistance system of claim 15 wherein  
2 the consumable re-order program automatically initiates an order for  
3 consumables in response to identifying a need to replenish a consumable  
4 component.

1 18. The consumable order assistance system of claim 14 wherein  
2 the electronic communication link comprises an e-mail system within the  
3 network environment, wherein a list of consumables that need replacement are  
4 sent to the personal computer via an e-mail message from the centralized  
5 server.

1 19. The consumable order assistance system of claim 18 wherein  
2 the e-mail message includes a hot link to a web site of consumable reseller  
3 information.

1 20. The consumable order assistance system of claim 19 wherein  
2 the hot link is to a web site that is configured to work with an internal customer  
3 order system.

1 21. The consumable order assistance system of claim 19 wherein  
2 the hot link is to a web site that is configured to work with an external web site  
3 including a list of providers of the consumable.

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1           22.    The consumable order assistance system of claim 18 wherein  
2           the e-mail system facilitates consumable ordering by a purchaser at the personal  
3           computer.

1           23.    A computer-implemented system which implements a program  
2           in which consumable components of computer peripheral devices in a  
3           centralized network system are replenished, the system comprising:

4                a monitoring system which identifies a need to replenish one or more  
5           consumable components and/or perform maintenance for any one of a plurality  
6           of unique computer peripheral devices within the network system;

7                a notification system which notifies a user of the identified need to  
8           replenish components and/or perform maintenance; and

9                a consumable order placement system which generates an order with  
10          a supplier of consumables in response to a user authorizing the order.

1           24.    The computer-implemented system of claim 23 wherein the  
2           monitoring system comprises a server, a peripheral device having one or more  
3           consumable components, and a bi-directional communication link, wherein the  
4           server polls or sets up the peripheral device to perform an internal check and  
5           notifies the server when a need is determined to replenish one or more  
6           consumable components and/or perform maintenance.

1           25.    The computer-implemented system of claim 23 wherein the  
2           notification system comprises a server, at least one client PC, and a  
3           communication link provided between the server and the at least one client PC,  
4           wherein the server generates and forwards a notification to a user at one of the  
5           at least one client PC.

1           26.    The computer-implemented system of claim 23 wherein the  
2           consumable order placement system is resident on a central server within a  
3           network environment having a plurality of PCs.

1           27. The computer-implemented system of claim 23 wherein the  
2 consumable order placement system is resident on a PC within a network  
3 environment having a central server.

1           28. The computer-implemented system of claim 23 further  
2 comprising a consumable consolidation program for monitoring the at least one  
3 computer peripheral device to identify any need to replenish consumable and/or  
4 perform maintenance, consolidating the identified need to replenish consumables  
5 and/or perform maintenance for one or more of the at least one computer  
6 peripheral device in the network environment, and notifying a maintainer of the  
7 consolidated, identified need by rendering instructions that are sent to the  
8 maintainer at the personal computer.

1           29. The computer-implemented system of claim 28 wherein the  
2 consumable consolidation program notifies the maintainer of the consolidated,  
3 identified need by generating and forwarding an email to the maintainer that  
4 indicates the consolidated, identified need.

1           30. The computer-implemented system of claim 29 wherein the  
2 email comprises a notification that a printer needs replenishment of at least one  
3 consumable and/or maintenance.

1           31. The computer-implemented system of claim 29 wherein the  
2 email comprises a notification in the form of an itemized list that a plurality of  
3 computer peripheral devices each needs replenishment of at least one  
4 consumable and/or maintenance.

1           32. The computer-implemented system of claim 29 wherein the  
2 consumable consolidation program notifies the maintainer of the consolidated,  
3 identified need for a single computer peripheral device by consolidating the need



5 identifying a need to replenish a consumable component and/or  
6 perform maintenance for each of the at least one computer peripheral  
7 components; and

8 consolidating the identified need to replenish the consumable  
9 component or perform maintenance for one or more of the at least one  
10 computer peripheral device in the network.

1 38. The method of claim 37 further comprising notifying a network  
2 user of the consolidated, identified need by rendering and forwarding  
3 instructions to the network user.

1 39. The method of claim 37 wherein the network user is a  
2 maintainer interacting with the network at a personal computer.

1 40. The method of claim 37 wherein the network user is an end  
2 user interacting with the network at a personal computer having a device status  
3 interface.

1 41. The method of claim 37 wherein the network user is a  
2 purchaser of consumables interacting with the network at a personal computer.

1 42. The method of claim 37 wherein identifying comprises  
2 comparing a state of a consumable component with a predefined state, and  
3 when the compared identified state corresponds with the predefined state,  
4 generating an order request for the consumable for submission to a provider of  
5 the consumable via a communication link.

1 43. The method of claim 42 wherein the communication link  
2 comprises the Internet.



1           44.    The method of claim 37 wherein identifying a need comprises  
2    receiving a warning notification from a computer peripheral device that the  
3    computer peripheral device is down or is about to go down.

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